

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 – 18. (Cancelled)

19. (Currently Amended) An ultrasonic treatment method comprising:
feeding water to a tank;
~~dissolving~~ introducing air in said water;
disposing at least a portion of a living terrestrial animal or human ~~organism~~ in the aerated water; and
thereafter ultrasonically generating stable vibrating bubbles in said aerated water;
using a sensor to determine the presence of transient or inertial cavitation in the tank;
the generating of said stable vibrating bubbles including energizing a transducer with periods of first full-wave compression and rarefaction cycles alternating with periods of first rectified-wave compression pressure cycles sufficient to suppress inertial or transient cavitation for a predetermined interval; and
using a signal from the sensor to determine a percentage or proportion of rectification of said electrical signal to obviate or avoid inertial or transient cavitation.

20. (Original) The method defined in claim 19, further comprising automatically monitoring the aerated water in said tank to detect inertial or transient cavitation.

21. (Previously Presented) The method defined in claim 20, further comprising displaying a status of inertial or transient cavitation in the aerated water in said tank.

22. (Currently Amended) The method defined in claim 19, further

comprising:

removing the ~~organism~~ terrestrial animal or human from said tank;
thereafter delivering disinfectant and water to said tank; and
thereafter inducing ultrasonic transient cavitation in the water and disinfectant
in said tank.

23. (Original) The method defined in claim 22 wherein the inducing of said ultrasonic transient cavitation includes generating full-wave compression and rarefaction cycles at an ultrasonic frequency in the water and disinfectant in said tank.

24. (Original) The method defined in claim 23 wherein the inducing of said ultrasonic transient cavitation further includes sweeping said frequency.

25. (Previously Presented) The method defined in claim 19 wherein the periods of rectified-wave compression pressure cycles are less than about 40% of the total periods of full-wave compression and rarefaction cycles and periods of rectified-wave compression pressure cycles.

26. (Currently Amended) The method defined in claim 19 wherein the ~~dissolving~~ introducing of air in the water includes using a venturi injector disposed proximate to a bend in a feed pipe extending to said tank.

27 - 33. (Cancelled)

34. (Previously Presented) The method of claim 19, wherein the treatment is wound debridement or cleaning.

35. (Cancelled)

36. (New) The method of claim 19, wherein the first full-wave compression and rarefaction cycles have a first amplitude or intensity and a first repetition period; and

further comprising subsequently energizing said transducer with periods of second full-wave compression and rarefaction cycles alternating with periods of second rectified-wave compression pressure cycles;

said second full-wave compression and rarefaction cycles having a second amplitude or intensity greater or less than a first amplitude or intensity and a second pulse repetition period respectively less or greater than said first pulse repetition period and said second rectified-wave compression pressure cycles having second amplitude or intensity and said second pulse repetition period so that said second full-wave compression and rarefaction cycles alternating with periods of second rectified-wave compression pressure cycles are sufficient to suppress inertial or transient cavitation for a predetermined interval.